

CLAIMS

What is claimed is:

1. A method for preventing galvanic corrosion in fastener assemblies employing a metallic fastener insert, a threaded fastener and a receiving element, said method comprising the steps of:

a) providing a fastener and a fastener insert for retaining the fastener within said receiving element;

b) coating said fastener insert with a chromate free fluoropolymer composition; and

c) adjoining the fastener and coated fastener insert within said receiving element.

2. The method of Claim 1, wherein said fastener insert is cleaned prior to being coated.

3. The method of Claim 1, wherein said fastener insert is abraded prior to being coated.

4. The method of Claim 1, wherein said fastener insert is optionally pre-coated with a primer prior to applying said coating.

5. The method of Claim 1, wherein said coating applied to said fastener insert has an average dry thickness of between about 0.3 to 0.5 mils.

6. The method of Claim 5, wherein said coating is applied via a dip spin technique.

7. The method of Claim 6, wherein said coating is applied in multiple layers.

8. The method of Claim 5, wherein said coating is applied via spraying.

9. The method of Claim 1, wherein said coating has an average viscosity at the time of application of between about 20 to 30 seconds at 25°C.

10. The method of Claim 1, wherein said coating is cured upon said fastener insert by baking at a temperature of between about 180°C to about 240°C prior to being inserted into said receiving element.

11. A fastener assembly comprising:
a threaded fastener formed from a first metal;
a metallic fastener insert; and
a receiving element;
wherein at least one of the metallic fastener inserts and the receiving

element is formed from second metal;

whereby said fastener insert is coated with a chromate free fluoropolymer composition to reduce the potential occurrence of galvanic corrosion in the fastener assembly.

12. The fastener assembly of Claim 11, wherein said coating has an average dry thickness of between about 0.3 to 0.5 mils.

13. The fastener assembly insert of Claim 11, wherein said coating has an average viscosity at the time of application of between about 20 to 30 seconds at 25°C.

14. A coated metallic fastener insert of a fastener assembly including metallic fastener and a receiving element for said fastener insert, at least one of said insert, fastener and receiving element being formed from a metal alloy which is different from the metal of the other of said insert, fastener or substrate, said insert comprising:

a substantially cylindrical body of helically wound wire including a plurality of convolutions wherein the outer surface is coated with a chromate free fluoropolymer composition to preclude galvanic corrosion within said fastener assembly.

15. The coated metallic fastener insert of claim 14, wherein said insert is formed from stainless steel.

16. The coated metallic insert of claim 14, wherein said insert reduces galling of said fastener.

17. The coated metallic fastener insert of claim 14, further comprising a primer applied to said insert prior to the application of said fluoropolymer composition.

18. The coated metallic fastener insert of claim 14, wherein said coils of said insert provide 60° internal screw threads upon insertion within said tapped hole.